Army Vision - Force 2025 White Paper

23 January 2014

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Problem Statement – Force 2025

The future global security environment points to further instability, and as the Army remains a guardian of the Nation's security, it continues to change in the near-term, evolve in the mid-term, and innovate in the long-term. As the Army retains overmatch, we redesign the force to meet America's future needs.

The Army's challenge: To meet the demands of the future strategic environment in alignment with its strategic vision and priorities, the Army must make the BCT and enablers leaner while retaining capability, prevent overmatch through 2025, and set the conditions for fundamental change by 2030-40.

Decisive to our success for Force 2025 is continuity of vision and effort among Army senior leadership over time.

Components of the Solution

Typically, the Army has taken one of two routes in determining the way to optimize the force; one idea is that concepts should drive technological research and development, and the other on the idea that technology drives the way the Army fights conceptually. To maximize the benefits of both approaches in designing the force for 2025, a balanced approach is required to find the right ideas, the right technologies, and combine them in the force design so that overmatch is maintained.

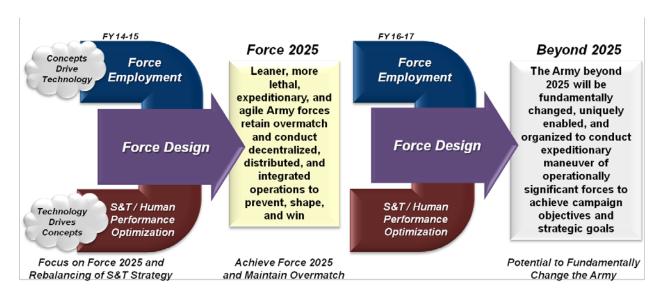


Figure 1. Lines of effort

Thorough fiscal years (FY) 2014 and 2015, the Army develops and refines the idea of Army forces in 2025. Entitled Force 2025, we conduct activities along three primary lines of effort: force employment; science and technology and human performance optimization; and force design. Force employment is defined as Army forces in 2025 conducting decentralized, distributed, and integrated operations to prevent, shape, and win using agile, responsive, and

innovative combined arms capabilities and special operations forces. The force employment line of effort focuses on the conceptual work that the Army does both internally and as part of the joint force. This includes revision and finalization of TRADOC Pam 525-3-1, The Army Operational Concept (AOC), the Strategic Landpower Concept, the Army Functional Concepts, and numerous other joint efforts. These documents describe the ideas which underpin how Force 2025 operates.

The science and technology² and human performance optimization line of effort focuses on the identification of capabilities which serve to optimize combat units (brigade and below) and determine how the Army must reprioritize science and technology (S&T) needs which enable this force to become as effective as possible by improving both combat effectiveness and reducing support requirements. This line of effort includes a deliberate and focused dialogue with all Centers of Excellence (CoE). The priorities should enable, not hamper, leaders and Soldiers of the future. Therefore, the Army also designs this force with a careful eye for specific capabilities and training methodologies to optimize human performance. The goal is to enable the force through prioritized needs that are as effective and efficient as possible.

These two lines of effort converge and are reconciled in the third line of effort, force design. In this line of effort, the Army develops an operational and organizational concept for the Army to meet the requirements of 2025. To further develop and validate these ideas, Force 2025 Maneuvers includes experiments, evaluations, exercises, wargaming, and other efforts focused on determining just how the Army organizes and designs the force. Ultimately, in the operational and organization concept for Force 2025, the Army outlines organizational structures and integrated DOTMLPF solutions needed to optimize the force to accomplish its assigned missions in the future. Simply put, to be successful, a more expeditionary Army must operate differently, enable differently, and organize differently.

Operate Differently: Changes to Force Employment

Beyond combat operations in Afghanistan, the Army conducts missions worldwide in support of U.S national security objectives, as well as objectives within the U.S. in support of civil authorities. The Total Force provides the foundation for joint operations, and although the demand for forces in Afghanistan continues to decrease, the requirement for strategic landpower capable of worldwide deployment endures.³

Today, Army concepts and doctrine focus the Army on combined arms maneuver, wide area security and special operations. These essential components deter conflict, prevail in war, and succeeded during contingencies. Achieving the necessary level of operational flexibility requires the Army to build upon a foundation of combined arms maneuver, wide area security, and special operations within the framework of unified land operations.⁴

Army forces of today conduct combined arms maneuver to gain physical, temporal, and psychological advantages over enemy organizations. Combined arms formations integrate combat power resident in the Army's seven warfighting functions with a wide array of related civil and military capabilities to defeat enemies and seize, retain, and exploit the initiative. Army forces conduct wide area security to consolidate gains, stabilize environments, and ensure

freedom of movement and action. Wide area security protects forces, populations, infrastructure, conducts relief, and reconstruction efforts, and sustained engagement focused on development of partner capabilities.⁵ Special Operations are direct action, strategic reconnaissance, unconventional warfare, foreign internal defense, civil affairs, military information support operations, counterterrorism, humanitarian assistance and theater search and rescue.

The complex operational environment of 2025 and beyond requires the Army to operate differently. The future Army operates decentralized, distributed, and integrated. Decentralization is the delegation of authority to subordinates and development of lateral relationships between units. Decentralized Army forces regulate operational and tactical tempo and respond to changing circumstances faster by leveraging the system. Distributed operations change the location, physical orientation, or posture of forces to create strength and flexibility through collaboration. The difference between distribution and dispersion lies in the deliberate vice random act of physically separating forces to reduce mass, hide the intent of operations, react to opposing forces' capabilities, or cover more terrain to deny adversaries opportunities in unmonitored areas. Integration brings together the appropriate components and capabilities from the Army and unified action partners to bear on operations. Army forces integrate capabilities to form, coordinate, or blend them into a functioning and unified whole.⁶

Force 2025 conducts operations to prevent, shape, and win using agile, responsive, and flexible combined arms and special operations forces guided by mission command. Exercising mission command, Army commanders provide their intent through mission orders enabling agile and empowered subordinates to use their initiative when conducting operations. Mission-tailored Army units, organized with the capabilities needed for a specific mission and environment, are engaged regionally and deliberately across the globe, proactively and persistently building partners, deterring adversaries, and overcoming challenges to defeat enemies rapidly through the informed use of physically separated or collocated, mutually supporting independent actions. Enabled by this collaborative system of units and capabilities, forces destroy, disorganize and disintegrate adversary systems with multiple, often simultaneous, actions integrated in time, space, and purpose that create multiple, concurrent dilemmas and defeat U.S. adversaries and enemies to accomplish campaign objectives decisively.⁷

In development, the multi-Service Strategic Landpower Concept, describes the application of military capabilities on land in coordination with other instruments of national power to achieve overarching security objectives for a given military campaign or operation. The foundation of strategic landpower rests on the proposition that the purpose of military action is to influence or compel human behavior in peacetime and in war. Strategic landpower proposes the joint force employ land forces to gain positional and psychological advantages by understanding, influencing, and if necessary compelling human behaviors and perceptions. When employed, strategic landpower prevents conflict, manages or contains conflict, and, when necessary, defeats adversaries.⁸

Future Army operations are part of the joint team and a strategic whole-of government approach. The nature of joint operations is expected to become even more difficult as the military is asked to provide options to policy makers concerning complex problems, such as countering anti-access and area denial. Additionally, over the next two years the Army assists

the joint community in the development of other targeted concepts to support the Capstone Concept for Joint Operations including: the Joint Concept for Rapid Aggregation, the Joint Concept for Entry Operations, and the Joint Concept for Cyberspace. The family of Joint concepts and the Army Concept Framework will describe in detail how the Army of 2025 will fight, win, and accomplish other missions.

Enable Differently: Changes to S&T and Human Performance Optimization

The Army should balance investments to deliver incremental improvements and S&T efforts with leap-ahead potential. In addition, the Army develops a coordinated modernization plan aligning the Army's 30-year portfolio analysis with the Army Plan and Army Concept Framework. In addition, the current Army strategic priorities (figure 2) do not capture the full temporal nature of the Army's modernization challenge to develop a more expeditionary BCT while retaining capability, prevent the loss of overmatch through 2025, and set the conditions for fundamental change beyond 2025.

ASPG Strategic Priorities*

General Prioritization and Timing (Timeframes per the ASPG)

The Short-Term (FY16-19)

A recovery path in which the Army, while reducing manning to end-strength goals, recovers readiness and rebalances investments in modernization lost in the first years of the Budget Control Act

- 20% of operating force receives necessary funds for collective training
- Focus on global response and Korean forces, and CBRN elimination units
- Regionally aligned force commitments prioritized
- End strength reached between FY15-17
- Soldier –centered modernization focus continues balanced with focused S&T to maintain overmatch (as examples, the network, cyber defense, CBRN elimination and expeditionary air defense)

The Mid-Term (FY20-22)

A transition period as the Army continues to invest in modernization and readiness to abate risk to the force if needed to support one sustained conflict

- Readiness shifts back to the broader Army
- Resume deferred modernization (ground combat vehicle, Armed Aerial Scout, LandWarNet)
- Capital investments preserve the organic industrial base (programs such as, the joint light tactical and armored multi-purpose vehicles)

The Long-Term (FY23 and beyond)

Investments in modernization and readiness made in the short-term and mid-term horizons under the Budget Control Act will begin to pay off in the full expression of an undersized, but campaign quality Total Army

- Army achieves sufficient balance to mitigate risk across readiness, modernization and end strength
- The Army emerges undersized for the challenges it faces in the defense strategy
 - * ASPG 2013 (p 19-21), ASPG 2014 Draft (p 20-30), CSA Strategic Priorities, Oct 2013

Figure 2. Strategic priorities

Currently, the Army's Long-range Investments "operationalize" an equipment strategy by synchronizing requirements, resourcing, and acquisition. The Army materiel development

community must refocus its strategy to enable Force 2025 to be more effective and accomplish a wider range of missions. *TRADOC recommends*:

- The Army aligns its S&T strategies to enable Force 2025.
- The Army ensures implementation plans account for integration of warfighter needs, emerging technology, and S&T lines of effort.
- Army Intelligence estimates assess overmatch areas that will assist in the development of S&T guidance that account for future threats.
- The Army focuses on outcome-oriented innovative research and development seeking technologies for the Army in 2025 and beyond.
- The Army identifies the technology focus areas that deliver capabilities to Force 2025 that warrant elevation as high priority efforts.

TRADOC insights illustrate that specific S&T areas enable the expeditionary Army the CSA envisions. Considering this, the S&T community should integrate the following lines of effort to change the force fundamentally beyond 2025:

- Information to decision. Reduce surprise by enabling mission command, relevant intelligence dissemination, decision superiority, stronger encryption, and cyber dominance.
- Human performance optimization. Maximize individual and team performance; accelerate Army professionals, and holistic fitness.
- Robotics. Enable and augment humans to accomplish ultra-hazardous tasks.
- Mobile, protected platforms. Deploy globally and rapidly; seize and maintain initiative through lightweight protective platforms and firepower.
- Improved lethality. Increased lethality; directed energy weapons; mobile ground launched long range precision fires.
- Optimized logistics. Reduced reliance on intermediate staging bases and sustainment forces; self-sufficient combat units.
- Aviation. Extended reach; increased lethality; heavy lift.

Future operating environments will be more complex. Small unit leaders will be decentralized from parent organizations and required to process large amounts of information at the increased speed in which events unfold and make critical decisions without higher-level approval. As a result, the Army should exploit ways to reduce both physical and cognitive burdens to enhance Soldiers' ability to perform in these challenging environments.

Many advances that enable optimized human performance are linked to resilient mission command systems. Near-term network modernization will provide a secure, interoperable, transport mechanism can provide a bridge across joint and multinational partners.

Interoperability is essential for unified action, and the Force in 2025 needs to communicate with partners to succeed.

Currently, TRADOC is working with S&T stakeholders to identify additional technologies that can mature and be fielded to BCTs by 2025 to set the conditions that will fundamentally change the way the Army fights in the far-term. This group will determine the value of candidate technologies based on the following questions:

- Does the technology enable the U.S. to maintain overmatch?
- Does the technology maintain or increase the capability of units and enable more expeditionary BCTs?
- Does the technology enable combat units to be more self-sustaining or conversely reduce the logistical demand?

Regardless of how technologies are prioritized, there is little time remaining to influence the S&T strategy and POM that equips the Army of 2025. Specifically, POM prioritization of any new start that the Army intends to field by 2025 must occur no later than FY17 based on an estimated 6-year research and development cycle maturing to Technology Readiness Level 8-9 no later than 2023. As a result, the Army's opportunity to influence material development by 2025 is fleeting. These potential technological advances and the way in which the Army fights must come together in a balanced and holistic force design.

Organize Differently: Changes to Force Design

Force design combines the changes to force employment with the enhancements of S&T and human performance initiatives to inform the design of new or modified Army organizations. This confluence of force design efforts is captured in an operational and organizational (O&O) concept. The O&O concept explains in conceptual terms how the Army envisions a proposed organization achieve its warfighting mission. The operational concept focuses on the concept of employment while the organizational concept delineates the specific functions, roles, and responsibilities of the organization. The O&O concept also focuses on describing change. It delineates how the Army envisions the transition from the current organization to the proposed design by specifying DOTMLPF changes that must occur to achieve a complete capability.

Specifically, force design identifies the proposed DOTMLPF solution set that mitigate specific capability gaps. Further, force design explains how the proposed organizational solutions (new or reorganized units) employ the new capabilities to solve the military problem. Finally, force design clearly identifies the known limitations and dependencies associated with the organizational solution. See figure below.

Force Design

- Optimized combat units (BCT 2025)
- Increased Army expeditionary capability
- More effectively mission tailored, regionally aligned, and globally responsive
- More expeditionary force that has retained capability
- Able to provide flexible joint task force-capable headquarters HQs
- Forces are capable of joint entry operations
- Defense of the homeland (CBRN) and counter-proliferation capabilities maintained
- Ability to counter anti-access and area denial improved

Figure 3. Force design objectives

The FY12 and FY13 experimentation campaign consisted of a series of Army integrating experiments to assess the effects of specified Army 2020 force design updates (FDUs) and warfighting function initiatives ¹⁰ across all joint operational phases and multiple samples of military operations. FY12 Experimentation focused primarily on phases II (seize the initiative) and III (dominate), and FY13 Experimentation focused on major operations as part of a theater campaign. Experimentation efforts in FY14 and FY15 will focus on experimenting with ideas out to 2025. This will culminate in the publication of an O&O concept for Force 2025 by the end of FY15 in order to inform doctrine and organizational (FDU) development, forecast the necessary skill, knowledge, and ability sets for Soldiers and leaders, and influence materiel, training, and facilities budgeting and programming cycles. ¹¹

Ultimately, the Force 2025 design mitigates risk and judiciously selects from the warfighting concepts and technologies of the present to field new innovative organizations and capabilities for the future. The Force 2025 is more responsive and expeditionary than it is today to realize a significant strategic landpower capability. This requires combat formations that are deployed with greater ease and speed, and are less of a sustainment burden. Additionally, the Army BCT in 2025 needs improved mobility and, at least, retain the lethality and protection of today's BCT. To fulfill the requirements of BCT 2025, the Army conducts exercises in multiple venues to experiment with concepts and capabilities that enable a more expeditionary, lighter, and more capable BCT. The themes of Force 2025 Maneuvers focus on improving specific capabilities, to include, but not limited to, sustainment; lethality, mobility, and protection; mission command on the move; countering weapons of mass destruction (CWMD), CBRN, and high-yield explosives; deployment and employment of operationally significant forces; cyberspace operations; and the human dimension. ¹²

Choices and Risk

As the Army moves toward Force 2025, senior leaders face stark choices. Currently, the perceived focus of Army leadership is maintain end strength in anticipation of complex contingencies that will require large numbers of ground forces such as CWMD missions. Leadership may instead change its focus to developing and implementing DOTMLPF solutions to enable expeditionary BCTs with fewer soldiers. With anticipated reduction in end-strength, Army leadership will have to make the decisions on where to reduce the force from within established Army communities (transportation, aviation, armor, intelligence, and others). This

friction requires constant leadership attention and adjudication by an unbiased, authoritative source that assure force structure reductions are made where feasible, regardless of the politics.

In addition to Army leadership, warfighter, S&T, test, program management, and evaluation communities, and the Army Staff and Secretariat accepts this effort as the one of the top priorities for the future Army. On a technical level, joint capability integrated development documents may need to be created or changes to implement Force 2025 changes, and this will need to be aggressively pushed by Army leadership. On a cultural level, inertia against new technologies and information systems needs to be overcome. Simply, the Army will only be successful in overcoming these challenges if it can mobilize the Total Army and move steadfastly toward the successful achievement of a singular focused vision for the force of 2025.

Conclusion

Over the past 12 years of conflict, the Army has proven itself well. Soldiers have displayed mental and physical toughness and courage under fire. The Army is the most versatile, agile, rapidly deployable, and sustainable strategic land force in the world. The Army must be ready to answer the Nation's call. This initiative will take the support and continuous effort of the Total Army team over many years to bring to reality. By 2025, a more expeditionary Army must operate differently, enable forces differently, and organize differently to maintain overmatch and to set the conditions for fundamental long-term change.

¹ 2013Army Posture Statement.

²Discussion of the change of this line from S&T to "warfighter priorities" terminology is currently underway.

³ 2013 Army Posture Statement.

⁴ TRADOC Pam 525-3-1, The Army Operating Concept, 2010, www.tradoc.army.mil/tpubs/pams/tp525-3-1.pdf.

⁵ Ibid.

⁶ Coordinating Draft, TRADOC Pam 525-3-1, 2013.

⁷ Ibid.

⁸ Ibid.

⁹ Army 2020 O&O v2 (Draft).

¹⁰Specified A2020 initiatives consisted of: BCT enhancement with a third maneuver battalion, hybrid fires battalion, and sustainment companies; the capabilities required for the reconnaissance and security BCT (R&S BCT); addition of a Division Artillery HQ and reorganization of the Fires Brigade; Maneuver Enhancement Brigade reorganization; creation of the Expeditionary Military Intelligence Brigade); implementation of the new Sustainment concept and reorganization; echelons above brigade mission command requirements; and identification of special forcesconventional forces interdependence.

¹¹ Ibid.

¹² Douglas Macgregor, 2011; Future Experimentation Concept Draft, December 16, 2012.